Fig. 12

S01 convert input two text sentences S1 and S2 into RO trees Ta and Tb, respectively

S02 numbers from 1 to positive integer n to roots of all subtrees of the RO trees Ta and Tb in depth first order from a root of the RO tree

S03 x = n1 where n1 denotes number of vertexes of the tree Ta

S04 y = n2 where n2 denotes number of vertexes of the tree Tb

S05 calculate a distance D(Fa(x), Fb(y)) between a forest Fa(x) and a forest Fb(y), using formula 2

S06 Is Ta(x) a subtree consisting of one vertex?

S07 Is Tb(y) a subtree consisting of one vertex?

S08 calculate a distance D(Ta(x), Tb(y)) between the subtree Ta(x) and the subtree Tb(y), using formula 3

S09 calculate the distance D(Ta(x), Tb(y)) between the subtree Ta(x) and the subtree Tb(y), using formula 4

S10 calculate the distance D(Ta(x), Tb(y)) between the subtree Ta(x) and the subtree Tb(y), using formula 1

S11 Is y a root of Tb?

S13 Is x a root of Ta?

S15 calculate a distance between the text sentences S1 and S2, using formulae 7 or 8